

EMS Course Requirements

The following outlines should be followed when creating your course syllabi. The minimum course hours must be met, but they can be exceeded depending on the needs of your class. These times include skills labs and lecture, but competency based sections have no time recommendations. These should be scheduled based upon the competency of individual students, but you must account for them (estimates where needed) in your course syllabus for approval.

Below are the course requirements for:

- Emergency Medical Responder
- Emergency Medical Technician
- Advanced Emergency Medical Technician
- Paramedic
- Basic Advanced to Advanced Emergency Medical Technician Bridge Course
- Emergency Medical Technician Intermediate to Paramedic Bridge Course

EMR Course

The Emergency Medical Responder Course must have a minimum course time of 49.5 hours. 44.5 hours are core National Education Standards (NES) curricula and the remaining 5 hours are Indiana required added curriculum. **(See EMR Hours PDF)**

The following skills must be taught and verified in the EMR course:

- Oral airway
- BVM
- Sellick's Maneuver
- Head-tilt chin lift
- Jaw thrust
- Modified chin lift
- Obstruction—manual
- Oxygen therapy
- Nasal cannula
- Non-rebreather face mask
- Upper airway suctioning
- Manual BP
- Unit dose auto-injectors for self or peer care (MARK I)
- Eye irrigation
- Hemorrhage control
- Emergency moves for endangered patients

Cardiac Care

- CPR
- AED
- Assisted normal delivery
- *Additional module on proper use of Tourniquets*
- *Additional module on proper way to Splint Extremities*
- *Additional module on proper use of Cervical Collars*
- *Additional module on proper use of Long Spine Board and Spinal Immobilization*
- *Additional module on proper use of Pulse Ox/Carbon Monoxide monitoring*
- *Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum*
 - These modules exceed the National Education Standards set by NHTSA

EMR students must complete 20 hours of continuing education every two years in order to remain certified.

Emergency Medical Responder		Minimum Times per Section
		Skills time included in each section
Section 1. Preparatory		5.5
Section 2. Anatomy and Physiology		2
Section 3. Medical Terminology		0.5
Section 4. Pathophysiology		0.5
Section 5. Lifespan Development		1
Section 6. Public Health		0.5
Section 7. Pharmacology		0.5
Section 8. Airway/Respiratory/Ventilation		2.5
Section 9. Assessment		2.5
Section 10. Medicine		8
Section 11. Shock and Resuscitation		4
Section 12. Trauma		7.5
Section 13. Special Patient Populations		6.5
Section 14. EMS Operations		3
		Total NES Core Hours
		44.5
Section 15. Indiana Added Curriculum		
A. Indiana Driving Laws		1
B. Autism Awareness		Satisfied in NES
C. SIDS		Satisfied in NES
D. HazMat Awareness		4
E. Terrorism Response and Disaster Management	AWR-160 satisfies	Satisfied in NES
F. Cervical Collar		competency based
G. Long Back Board		competency based
H. POST/Advance Directives		1
I. Pulse Oximetry/CO Monitoring		competency based
		Total Indiana Hours
		6
http://www.ems.gov/pdf/811077b.pdf		Total Minimum Course Hours
		50.5

EMT Course

The Emergency Medical Technician Course must have a minimum course time of 159 hours. 138 hours are core National Education Standards (NES) curricula, 16 hours are Indiana mandated field hours (hospital and ambulance), and the remaining 5 hours are Indiana required additional curriculum. 8 of the 159 hours can be substituted for NIMS IS 100, 200, 700, and 800 (see EMT Hours PDF). If you have students who are current EMRs, they are not required to repeat the additional Indiana added curriculum unless mandated by your training institution. **(See EMT Hours PDF)**

The following skills must be taught and verified in the EMT course:

All skills of EMR (above) plus:

- Humidifiers
- Partial rebreathers
- Venturi mask
- Manually Triggered Ventilator (MTV)
- Automatic Transport Ventilator (ATV)
- Oral and Nasal airways
- Manual and auto BP

Assisted Medications

- Assisting a patient in administering his/her own prescribed medications, including auto-injection

Technician of Medicine Administration

- -Buccal
- -Oral

Administered Meds

- PHYSICIAN-approved over-the-counter medications (oral glucose, ASA for chest pain of suspected ischemic origin)

Trauma Care

- Seated spinal immobilization
- Traction splinting
- Mechanical pt restraint
- MAST/PASG
- Rapid extrication

Cardiac Care

- Mechanical CPR
- Assisted complicated delivery
- ***Additional module on Esophageal, Tracheal, Multi-Lumen, and Supraglottic Airway***
- ***Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum***
 - These modules exceed the National Education Standards set by NHTSA
- Students should observe emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care. **Students must perform 10 patient assessments.** These can be performed in an ED, ambulance, clinic, nursing home, doctor's office, or on standardized patients if clinical settings are not available.
- **8 hours ambulance ride time**
- **8 hours hospital time**

EMT Students must complete 40 hours of didactic continuing education plus skills verification every two years in order to remain certified.

Emergency Medical Technician		Minimum Times per Section
		Skills time included in each section
Section 1. Preparatory		11
Section 2. Anatomy and Physiology		5
Section 3. Medical Terminology		1
Section 4. Pathophysiology		5
Section 5. Lifespan Development		1.5
Section 6. Public Health		0.5
Section 7. Pharmacology		3
Section 8. Airway/Respiratory/Ventilation		5
Section 9. Assessment		5
Section 10. Medicine		33
Section 11. Shock and Resuscitation		4
Section 12. Trauma		25
Section 13. Special Patient Populations		19
Section 14. EMS Operations		20
ICS courses (100, 200, 700, and 800)		
If completed, subtract 8 hours from operations		
		Total NES Core Hours
		138
Section 15. Patient Contacts (10)		
Section 16. Ambulance Field Internship		8
Section 17. Hospital Clinical Internship		8
Section 15. Indiana Added Curriculum		
A. Indiana Driving Laws		1
B. Autism Awareness		Satisfied in NES
C. SIDS		Satisfied in NES
D. HazMat Awareness		4
E. Terrorism Response and Disaster Management	AWR-160 satisfies	Satisfied in NES
F. Esophageal, Tracheal, Multi-Lumen, and Supraglottic Airway		Competency Based
G. Peripheral IV Maintenance		Competency Based
H. POST/Advance Directives		1
		Total Indiana Hours
		6
http://www.ems.gov/pdf/811077c.pdf		Total Minimum Course Hours
		160

AEMT Course

The Advanced Emergency Medical Technician Course must have a minimum course time of 160 hours (**See AEMT Hours PDF**). Students must satisfy the hospital and clinical skills requirement, but hours are not assigned as times will be based upon individual student competency.

The following skills must be taught and verified in the AEMT course:

All skills of EMT (above) plus:

- Esophageal-Tracheal Multi-Lumen Airways
- Blood glucose monitor
- Peripheral IV insertion
- IV fluid infusion
- IO
- Tracheobronchial suctioning of the already intubated patient

Technician of Medicine Administration

- Aerosolized
- Subcutaneous
- Intramuscular
- Nebulized
- Sublingual
- Intranasal
- IV push of D50 and narcotic antagonist only

Administered Meds

- SL Nitroglycerine for chest pain of suspected ischemic origin
- SQ or IM epinephrine for anaphylaxis
- glucagon and IV D50 for hypoglycemia
- Inhaled beta agonist for dyspnea and wheezing
- Narcotic antagonist
- Nitrous oxide for pain relief
- *Additional module on Adult IO*
- *Additional Module on EKG application and interpretation of Sinus Rhythms, PEA, V-Fib, V-Tach, and Asystole*
- *Manual Defibrillation*
- *12-lead Application and Transmission ONLY*
- *Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum*
 - These modules exceed the National Education Standards set by NHTSA

Students must also complete the following hospital and clinical experience:

- Properly **administer medications to at least 15 live patients**
- Successfully **perform all steps and access venous circulation at least 25 times on live patients** of various age groups
- **Ventilate at least 20 live patients** of various age groups
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **chest pain**
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **respiratory distress**
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **altered mental status**
- Demonstrate the ability to perform an adequate assessment on **pediatric, adult, and geriatric** patients

AEMT Students must complete 54 hours of didactic continuing education plus skills verification every two years in order to remain certified.

Advanced Emergency Medical Technician		Minimum Times per Section
		Skills time included in each section
Section 1. Preparatory		10
Section 2. Anatomy and Physiology		8
Section 3. Medical Terminology		2
Section 4. Pathophysiology		8
Section 5. Lifespan Development		0.5
Section 6. Public Health		0.5
Section 7. Pharmacology		30
Section 8. Airway/Respiratory/Ventilation		4
Section 9. Assessment		6
Section 10. Medicine		30
Section 11. Shock and Resuscitation		4
Section 12. Trauma		24
Section 13. Special Patient Populations		21
Section 14. EMS Operations		12
		Total NES Hours
		160
Section 15. Properly administer medications to at least 15 live patients		
Section 16. Successfully perform all steps and access venous circulation at least 25 times on live patients of various age groups		
Section 17. Ventilate at least 20 live patients of various age groups		
Section 18. Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with chest pain		
Section 19. Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with respiratory distress		
Section 20. Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with altered mental status		
Section 21. Demonstrate the ability to perform an adequate assessment on pediatric, adult, and geriatric patients		
Section 22. Indiana Added Curriculum		
A. Adult IO		Competency Based
B. EKG Monitoring, Interpretation, and Defibrillation		Didactic 20
		Laboratory 8
C. 12-Lead EKG Acquisition and Transmission		Didactic 2.5
		Laboratory Competency Based
		Total Indiana Added Hours 30.5
http://www.ems.gov/pdf/811077d.pdf		Total Minimum Course Hours 190.5

Paramedic Course

The Paramedic must have a minimum course time of 452 hours. (See **Paramedic Hours PDF**)

The following skills must be taught and verified in the Paramedic course:

All skills of AEMT (above) plus:

- BiPAP/CPAP
- Needle chest decompression
- Chest tube monitoring
- Percutaneous cricothyrotomy²
- ETCO₂/Capnography
- NG/OG tube
- Nasal and oral Endotracheal intubation
- Airway obstruction removal by direct laryngoscopy
- PEEP
- EKG interpretation
- Interpretive 12 Lead
- Blood chemistry analysis
- Tracheobronchial Suctioning

Technician of Medicine Administration

- Endotracheal
- IV (push and infusion)
- NG
- Rectal
- IO
- Topical
- Accessing implanted central IV port

Administered Meds

- Physician-approved medications
- Maintenance of blood administration
- Thrombolytics initiation

Trauma Care

- Morgan lens

Cardiac Care

- Cardioversion
- Carotid massage
- Manual defibrillation
- TC pacing
- ***Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum***
 - These modules would exceed the National Education Standards set by NHTSA

Students must also complete the following hospital and clinical experience:

- No fewer than fifty (50) attempts at airway management across all age levels, with a 90% success rate utilizing endotracheal intubation in their last ten (10) attempts.
- Must be 100% successful in the management of their last 20 attempts at airway management.
- Clinical experience **must** include the operating room, recovery room, ICU, coronary care department, labor and delivery room, pediatrics, and ER.
- All students must have adequate exposure, as determined by the program medical director and advisory committee, to pediatric, obstetric, psychiatric, and geriatric patients.
- All students must complete a **Field Internship** and successfully manage, assess, and treat patients. **Minimum Team Leads** must be established by the program medical director and advisory committee and be completed by every student.
- Total course hours including lecture, skills, and internships should range between 1000 and 1300 Total hours.

Paramedic Students must complete 72 hours of didactic continuing education plus skills verification every two years in order to remain certified.

Basic Advanced to Advanced EMT Bridge Course

The AEMT Bridge course must have a minimum course time of 100 hours. (See **AEMT Bridge PDF**).
The following skills must be taught and verified in the AEMT course:

All skills of EMT (above) plus:

- Esophageal-Tracheal Multi-Lumen Airways
- Blood glucose monitor
- Peripheral IV insertion
- IV fluid infusion
- IO
- Tracheobronchial suctioning of the already intubated patient

Technician of Medicine Administration

- Aerosolized
- Subcutaneous
- Intramuscular
- Nebulized
- Sublingual
- Intranasal
- IV push of D50 and narcotic antagonist only

Administered Meds

- SL Nitroglycerine for chest pain of suspected ischemic origin
- SQ or IM epinephrine for anaphylaxis
- glucagon and IV D50 for hypoglycemia
- Inhaled beta agonist for dyspnea and wheezing
- Narcotic antagonist
- Nitrous oxide for pain relief
- ***Additional module on Adult IO***
- ***Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum***
 - These modules exceed the National Education Standards set by NHTSA
- Training program must be sponsored / supervised by an ALS Indiana Certified Training Institution; however, this institution **does not need to be CoAEMSP accredited**.
- Training must be conducted by a person certified at that level or higher.
- Must be supervised by an Indiana Certified Primary Instructor.
- Must submit training application with all required documentation to IDHS and received course approval prior to starting the transition program.
- All personnel taking the transition course must a current Basic Advanced EMT.

Skills Validation

Students must complete the following clinical and skills experience ***unless*** students can present a portfolio verifying competency in each section from their previous Basic Advanced EMT course or in the course of everyday Basic Advanced operations:

- Properly **administer medications to at least 15 live patients**
- Successfully **perform all steps and access venous circulation at least 25 times on live patients** of various age groups
- **Ventilate at least 20 live patients** of various age groups
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **chest pain**
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **respiratory distress**
- Demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with **altered mental status**

- Demonstrate the ability to perform an adequate assessment on **pediatric, adult, and geriatric** patients

Field Internship

At the conclusion of the didactic phase for the AEMT program, the candidate will complete a field internship comprised of a minimum of (10) ten ambulance patient contacts where the candidate successfully performs and manages the ALS assessment and at least (1) one ALS skill included in the AEMT scope of practice. The training Institution will then sign off on the candidate once all requirements have been met to initiate eligibility for certification testing.

Testing

Through confirmation by National Registry, the **only** Bridge students who do not need to take the Registry practical are those who have **current** I-85 or I-99 National Registry Certifications. They do not consider the Indiana only certifications to be sufficient to bypass the practical skills exam. This practice cancels our previous understanding that ALL bridge students would not need to take the practical portion of their National Registry test.

Course Completion

All courses must be started by June 30, 2014. No new courses will be allowed to begin after June 30, 2014. All students currently enrolled in a bridge course as of June 30, 2014 will be allowed to complete the course, but their certification will be lowered to the EMT level until successful completion of the course and NREMT testing.

AEMT Bridge	Approximate Lecture Times *	Times per Section
Module 1: Preparatory		5
Introduction, Policy & Procedures; <i>Intro to AEMT, EMS Systems, Public Health</i> , and Research, Workplace Safety & Wellness	3	
Ethics and Medical/Legal, Ambulance Operations & Response, <i>Therapeutic Communications and Documentation</i>	3	
Module 2: Anatomy, Physiology, Pathophysiology		24
Medical Terminology, Chemical & cellular basis of life, cell membrane, Tissues, Regional anatomy	8	
Systems: skeletal, muscular, integumentary, <i>respiratory anatomy & physiology, cardiac anatomy & physiology</i> , nervous, endocrine, gastrointestinal	8	
Systems: , urinary, reproductive; Life Span Development & Cultural Considerations; Pathophysiology: <i>hypoxic cellular injury, glucose use, acid-base & electrolyte disturbances</i>	8	
Module 3: Pharmacology		24
Principles of Pharmacology: Profiles, <i>Legislation, Safety and Regulation, Special Considerations, Naming, Classification, Absorption, Distribution, Elimination</i> ; Medical Math: Drug dose & drip calculations	8	
<i>Autonomic pharmacology, Mechanism of action, Medication response relationships, Medication interactions, Toxicity; Medication Administration: Routes, techniques, Peripheral IV and IO access; SKILLS</i>	8	

<i>Emergency medications for AEMT and their names, actions, indications, contraindications, complications, routes of administration, side effect, interactions, dosages</i>	8	
Module 4: Assessment & Initial Management		10
<i>Primary pt assessment</i> , Clinical reasoning, <i>Vitals & monitoring devices</i> , History, <i>secondary assessment</i> & reassessment	4	
<i>Airway assessment and management, pathophysiology of respiration, Resuscitation: Managing Shock & cardiac arrest</i>	6	
Module 5: Medical		18
<i>Respiratory disorders and management, cardiovascular disorders and management, Neurology</i>	6	
<i>Endocrine</i> , Abdominal/Gastrointestinal, <i>Renal, Genitourinary</i> , Gynecology, Hematology, Immunology	6	
<i>Infectious Disease, Non-Traumatic musculoskeletal disorders, Disorders of EENT, Psychiatric, Toxicology</i>	6	
Module 6: Trauma, Shock , and Resuscitation		10
Trauma systems & overview, MOI & assessment, <i>Soft-tissue injury, Bleeding, Musculoskeletal, Head, brain, face & neck trauma</i>	6	
<i>Thoracic, Abdominal/GU trauma, Neuro trauma</i> , Environmental emergencies, <i>special considerations in trauma, multi-system trauma</i>	4	
Module 7: Special Patient Populations & Operations		8
Obstetrics, neonatal care, pediatrics, <i>geriatrics, patients with special challenges</i>	6	
Ground vehicle operations, incident management, HazMat, Air Medical, Vehicle extrication, MCI and Terrorism	2	
Total	100	
*All Times are indicated in hours		

EMT-Intermediate to Paramedic Bridge Course

The EMT-I to Paramedic Bridge course must have minimum course times of 256 hours. (See **AEMT Bridge PDF**)

The following skills must be taught and verified in the Bridge course:

All skills of AEMT (above) plus:

- BiPAP/CPAP
- Needle chest decompression
- Chest tube monitoring
- Percutaneous cricothyrotomy
- ETCO₂/Capnography
- NG/OG tube
- Nasal and oral Endotracheal intubation
- Airway obstruction removal by direct laryngoscopy
- PEEP
- EKG interpretation
- Interpretive 12 Lead
- Blood chemistry analysis
- Tracheobronchial Suctioning

Technician of Medicine Administration

- Endotracheal
- IV (push and infusion)
- NG
- Rectal
- IO
- Topical
- Accessing implanted central IV port

Administered Meds

- Physician-approved medications
- Maintenance of blood administration
- Thrombolytics initiation

Trauma Care

- Morgan lens

Cardiac Care

- Cardioversion
- Carotid massage
- Manual defibrillation
- TC pacing
- ***Additional modules assigned by the Indiana EMS Commission if required beyond the standard curriculum***

These modules would exceed the National Education Standards set by NHTSA

- Training program must be sponsored / supervised by an ALS Indiana Certified Training Institution. This institution **does not need to be CoAEMSP accredited; however if they do not have a current accreditation or waiver, they must put in for a waiver of the Indiana 836 rule (that states any training institution wishing to teach a Paramedic course must be accredited) with the EMS Commission.**
- Training must be conducted by a person certified at the Paramedic level.
- Must be supervised by an Indiana Certified Primary Instructor.
- Must submit training application with all required documentation to IDHS and received course approval prior to starting the transition program.
- All personnel taking the transition course must a current EMT-Intermediate.

Skills Validation

Students must complete the following clinical and skills experience ***unless*** students can present a portfolio verifying competency in each section from their previous EMT-I course or in the course of everyday EMT-I operations:

- No fewer than fifty (50) attempts at airway management across all age levels, with a 90% success rate utilizing endotracheal intubation in their last ten (10) attempts.
- Must be 100% successful in the management of their last 20 attempts at airway management.
- Clinical experience **must** include the operating room, recovery room, ICU, coronary care department, labor and delivery room, pediatrics, and ER.
- All students must have adequate exposure, as determined by the program medical director and advisory committee, to pediatric, obstetric, psychiatric, and geriatric patients.

Field Internship

All students must complete a **Field Internship** and successfully manage, assess, and treat patients.

Minimum Team Leads must be established by the program medical director and advisory committee and be completed by every student.

Testing

Through confirmation by National Registry, the **only** Bridge students who do not need to take the Registry practical are those who have **current** I-85 or I-99 National Registry Certifications. They do not consider the Indiana only certifications to be sufficient to bypass the practical skills exam. This practice cancels our previous understanding that ALL bridge students would not need to take the practical portion of their National Registry test.

Course Completion

All courses must be started by June 30, 2014. No new courses will be allowed to begin after June 30, 2014. All students currently enrolled in a bridge course as of June 30, 2014 will be allowed to complete the course, but their certification will be lowered to the AEMT level until successful completion of the course and NREMT Paramedic testing.

EMT-I to Paramedic Bridge	Approximate Lecture Times *	Times per Section
Section 1. Preparatory		8
EMS Systems	2	
Workforce Safety and Wellness	1	
Public Health	1	
Medical, Legal, and Ethical Issues	2	
Communications	1	
Documentation	1	
Section 2. The Human Body and Human Systems		34
Anatomy and Physiology	20	
Pathophysiology	10	
Life Span Development	4	
Section 3. Pharmacology		28
Principles of Pharmacology	10	
Medication Administration	8	
Medication Formulary	10	
Section 4. Patient Assessment		8

Patient Assessment	6	
Critical Thinking and Clinical Decision Making	2	
Section 5. Airway Management		8
Airway Management and Ventilation	8	
Section 6. Medical		60
Respiratory Emergencies	8	
Cardiovascular Emergencies	14	
Neurologic Emergencies	2	
Diseases of the Eyes, Ears, Nose, and Throat	2	
Abdominal and Gastrointestinal Emergencies	2	
Genitourinary and Renal Emergencies	2	
Gynecologic Emergencies	2	
Endocrine Emergencies	2	
Hematologic Emergencies	2	
Immunologic Emergencies	2	
Infectious Diseases	2	
Toxicology	2	
Psychiatric Emergencies	2	
ACLS	16	
Section 7. Trauma		44
Trauma Systems and Mechanism of Injury	4	
Bleeding	4	
Soft-Tissue Trauma	4	
Burns	4	
Face and Neck Trauma	2	
Head and Spine Trauma	2	
Chest Trauma	2	
Abdominal and Genitourinary Trauma	2	
Orthopaedic Trauma	2	
Environmental Trauma	2	
PHTLS/ITLS Advanced Trauma	16	
Section 8. Shock and Resuscitation		16
Responding to the Field Code	8	
Management and Resuscitation of the Critical Patient	8	
Section 9. Special Patient Populations		36
Obstetrics	2	
Neonatal Care	2	
Pediatric Emergencies	8	
Geriatric Emergencies	4	
Patients With Special Challenges	4	
PALS/PEPP	16	
Section 10. Operations		14
Transport Operations	2	
Incident Management and Multiple-Casualty Incidents	2	

Vehicle Extrication and Special Rescue	2	
Hazardous Materials	2	
Terrorism	2	
Disaster Response	2	
Crime Scene Awareness	2	
<i>Grand Total</i>	256	
<i>*All Times are indicated in hours</i>		